surface when tested by the methods prescribed in §177.1330(e)(1), (3)(i) through (iv), (4), (5), and (6), except that

- (1) The total residue method using 3 percent acetic acid, as prescribed in §177.1330(e)(6)(i)(a), does not apply, and
- (2) The net acidified chloroform-soluble extractives from paper and paper-board complying with \$176.170 of this chapter may be corrected for wax, petrolatum, and mineral oil as provided in \$176.170(d)(5)(iii)(b) of this chapter.
- If the finished food-contact article is itself the subject of a regulation in parts 174, 175, 176, 177, 178, and §179.45 of this chapter, it shall also comply with any specifications and limitations prescribed for it by that regulation.
- (c) The finished food-contact layer made with basic copolymers containing more than 10 weight-percent but no more than 25 weight-percent of total polymer units derived from acrylic acid and with a maximum thickness of 0.0025 inch (2.5 mils) may be used in contact with food types I, II, IVB, VIA, VIB, VIIB, and VIII identified in table 1 of §176.170(c) of the chapter under conditions of use B through H as described in table 2 of §176.170(c) of this chapter, and in contact with food types III. IVA. V. VIIA. and IX identified in table 1 of §176.170(c) of this chapter under conditions of use E through G as described in table 2 of §176.170(c) of this
- (d) The provisions of this section are not applicable to ethylene-acrylic acid copolymers used in food-packaging adhesives complying with §175.105 of this chapter.

[42 FR 14572, Mar. 15, 1977, as amended at 51 FR 19060, May 27, 1986; 53 FR 44009, Nov. 1, 1988]

## § 177.1312 Ethylene-carbon monoxide copolymers.

The ethylene-carbon monoxide copolymers identified in paragraph (a) of this section may be safely used as components of articles intended for use in contact with food subject to the provisions of this section.

(a) *Identity*. For the purposes of this section, ethylene-carbon monoxide copolymers (CAS Reg. No. 25052-62-4) consist of the basic polymers produced by the copolymerization of ethylene and

carbon monoxide such that the copolymers contain not more than 30 weight-percent of polymer units derived from carbon monoxide.

- (b) Conditions of use. (1) The polymers may be safely used as components of the food-contact or interior core layer of multilaminate food-contact articles.
- (2) The polymers may be safely used as food-contact materials at temperatures not to exceed 121  $^{\circ}$ C (250  $^{\circ}$ F).
- (c) Specifications. (1) Food-contact layers formed from the basic copolymer identified in paragraph (a) of this section shall be limited to a thickness of not more than 0.01 centimeter (0.004 inch).
- (2) The copolymers identified in paragraph (a) of this section shall have a melt index not greater than 500 as determined by ASTM method D1238-82, condition E "Standard Test Method for Flow Rates of Thermoplastics by Extrusion Plastometer," which is incorporated by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from the American Society for Testing Materials, 1916 Race St., Philadelphia, PA 19103, or may be examined at the Center for Food Safety and Applied Nutrition (HFS-200), Food and Drug Administration, 200 C St. SW., Washington, DC, or at the Office of the Federal Register, 800 North Capitol St. NW., suite 700, Washington, DC.
- (3) The basic copolymer identified in paragraph (a) of this section, when extracted with the solvent or solvents characterizing the type of food and under the conditions of time and temperature characterizing the conditions of its intended use, as determined from tables 1 and 2 of §176.170(c) of this chapter, yields net chloroform-soluble extractives in each extracting solvent not to exceed 0.5 milligram per square inch of food-contact surface when tested by methods described in §176.170(d) of this chapter.
- (4) The provisions of this section are not applicable to ethylene-carbon monoxide copolymers complying with §175.105 of this chapter.

[57 FR 32422, July 22, 1992]